

REMARKS/ARGUMENTS

Claims 1-11, 13-35, and 39-42 are active in this application.

Applicants thank the Examiner for the courtesy of discussing this case with the Applicants' undersigned representative on April 25, 2005.

During this meeting, it was explained that the pending claims in this application are directed to nanoemulsions comprising an oily phase dispersed in an aqueous phase having a number size of less than 100 nm, at least one noionic or anionic amphiphilic lipid, at least one water-soluble nonionic polymer free of hydrophobic chains, and where the oily phase to amphiphilic weight ratio ranges from 1.2 to 10.

In addition, it was explained that the cited art relied upon in the rejection do not describe or suggest the claimed oil-in-water nanoemulsion. While Cervantes describes that oil-in-water nanoemulsions containing amphiphilic lipids were known, this had already been acknowledged in the present application on pages 1-2. The secondary publications describe that water-soluble nonionic thickeners are used in emulsions. However, there is nothing in the publications which suggest the desirability of the combination as claimed nor the advantages that the combination achieves (e.g., as described in the application on page 2). As again pointed out during the discussion, Applicants previously submitted data, in the L'Alloret August 31, 2004 Declaration ("August 2004 Declaration"), demonstrating the importance of selecting water-soluble non-ionic polymers relative to other types of thickening polymers.

Specifically, the data in this August 2004 Declaration demonstrated that polymers such as polyoxamer 338 and polyoxamer 403 were unable to thicken and stabilize nanoemulsion compositions relative to a poly(ethylene oxide) having a molar mass of 300,000 g/mol according to the claimed invention. More specifically, the composition of Example 1 from the specification was compared to two compositions where the poly

(ethylene oxide) having a molar mass of 300,000 g/mol was replaced with polyoxamer 338 (comparative example A) or polyoxamer 403 (comparative example B). The results of the analyses are presented in paragraphs 7, 8 and 9 of the August 2004 Declaration: "These results show that unlike compositions A and B, compositions according to the present invention provide thickened nanoemulsions which remain stable over time and over various temperature ranges."

During the April 2005 discussion, the Examiner indicated that he believed the scope of the claims to be broader than the data and suggested additional data demonstrating that some of the thickeners in the Cervantes publication are not as suitable as the polymers defined in the present claims for thickening oil-in-water nanoemulsions (Interview Summary, April 25, 2005). Consistent with the Examiner's suggestion, Applicants submit herewith a second Rule 132 Declaration from Florence L'Alloret executed on June 24, 2005 ("June 2005 Declaration"). In this June 2005 Declaration, a comparison between oil-in-water nanoemulsions with poly (ethylene oxide) having a molar mass of 300,000 g/mol, as representative of the claimed invention, was compared to similar compositions except the polymer was replaced with either hydroxymethylpropylcellulose (Example 2) or Hostacerin AMPS (Example 3). See June 2005 Declaration, part 5. It is also noted that both hydroxymethylpropylcellulose and Hostacerin AMPS do not meet the definition of the nonionic polymer in the claims and are examples of the thickeners described by Cervantes in col. 12, lines 34-44.

Each of Examples 1, 2, and 3 were then prepared (see June 2005 Declaration parts 5 and 6) and the resultant compositions assessed. As described in the June 2005 Declaration part 8 and evident from the Exhibit attached to the Declaration:

As shown in the attached Exhibit and presented in the above Table, the composition of Example 1 is transparent and has a turbidity of 288 NTU. In contrast, Examples 2 and 3 were

white in appearance and had significantly higher turbidities (greater than 1000 NTU).

As further discussed in part 10 of the Declaration:

These results show that unlike Examples 2 and 3 in which the thickeners from U.S. 5,925,341 were used, compositions according to the present invention provide thickened nanoemulsions which are transparent and with low turbidity. In addition, I have no reason to believe that the results obtained with poly (ethylene oxide) having a molar mass of 300,000 g/mol as a representative of the water-soluble nonionic polymer would not be similar for other combinations as defined in the claims of the present application.

The particular relevance and importance of these data in relation to what had been described by Cervantes is also discussed in the June 2005 Declaration in part 11:

These results are important because they demonstrate that the combination of an amphiphilic lipid, water-soluble nonionic polymer in a oil-in-water nanoemulsion has significant advantages for preparing stable, transparent compositions. As discussed in the above-identified application on page 2, there is a need to be able to thicken nanoemulsions without altering the cosmetic properties of the composition, such as its transparency (page 2, lines 16-28). U.S. 5,925,341 describes in column 12, optional additives, including thickeners and then follows with a discussion of possible thickeners, including cellulose derivatives (hydroxymethylpropylcellulose) and acrylate polymers such as Hostacerin. This patent does not emphasize any importance in selecting water-soluble nonionic polymers as claimed. Therefore, I find that the data presented in the Table above quite surprising in view of the discussion in the U.S. 5,925,341 patent.

In view of the fact that the cited references fail to describe or suggest the selection of at least one amphiphilic lipid, at least one water-soluble nonionic polymer, dispersed in an oily phase as defined in the pending claims coupled with the two Declarations demonstrating the advantages of this selection, surely the present claims cannot be considered obvious in view of the cited publications. Accordingly, Applicants request withdrawal of the rejection of obviousness-type double patenting in view of Cervantes, Woodward, Frerker, Yoshida,

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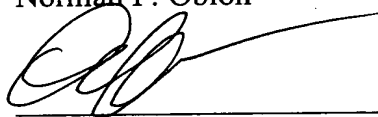
and Midha; the rejection under 35 U.S.C. § 103(a) in view of Cervantes, Woodward, Frerker, Yoshida, and Midha, Friedman, Binns, Bernecker, and/or Suzuki; and the rejection under 35 U.S.C. § 103(a) in view of Cervantes, Woodward, Frerker, Yoshida, and Midha, Friedman, Binns, Bernecker, and/or Suzuki further in view of FR 2787 027 and Simonnet.

Finally, Applicants request a Notice of Allowance indicating that Claims 1-11, 13-35, and 39-42 have been allowed.

Should the Examiner require any clarification about this case, he is invited to contact the undersigned at his convenience.

Respectfully submitted,

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